**Desertification movie script:**

Welcome by Anchorwoman: Good evening, and welcome to Earth Science Nightly News. Tonight, we have a special program about Africa, and a huge problem that is occurring there. Here to fill us in, our overseas correspondents (such and such) are located in several different deserts across Africa to witness firsthand the effects on the community by desertification.

**Introduction by Community Correspondents- brief overview of what Desertification is**

Scott first- Personal costs of water scarcity

Seth- human cost of water scarcity

Kiera- personal cost of desertification

Abi- human cost of desertification

Anchorwoman: Thank you Abi. At this point, we are extremely lucky to have three highly esteemed science professors from across the country join in on our water scarcity debate. Kyle?

Science Correspondent:

All sitting at one table, discussing the issue (like meet the press)

The Science Correspondent: Geographic, meteorological, and human factors affecting desertification.

Kyle: Thank you Joanna. Well, large amounts of people are being affected in many aspects by the desertification issue, but how exactly did it all start? We’ve got with us today three experts on this issue. All the way from Harvard University’s science department: Dr. Rasputia Lavonne, (Emily Waves), from the M.I.T. environmental research department Ms. Bon Quiqui (Kelsie Waves), and finally from the Land Institute of Chicago: Ms. Laquanda Jones (Mia waves).

Good evening and welcome. The topic today is desertification. How do you feel about this issue, Dr. Lavonne?

Emily: Desertification is definitely hurting everyone. The effects are tragic, have devastated many people and communities, and will continue to affect us unless it is stopped.

Kelsie: And the effects of it aren’t just focused towards people. Economies of countries are crumbling as many more areas are becoming affected by desertification.

Kyle: So, what exactly is causing this issue?

Emily: There are actually several causes. Overgrazing is one of the major issues. This occurs when plant life is exposed to livestock for an extended period of time, or by placing too many livestock on too small a piece of land.

Kelsie: Originally, people would copy nature and move their cattle in accordance to it. They would move cattle in response to food and water availability too. When this system was followed, overgrazing did not occur.

Emily: Now, cattle are kept in small areas and are not moved around. Areas to graze cattle are running out and new areas are created. The plant life in the land is slowly disappearing. This is causing water scarcity and it is destroying the land.

Mia: Also, over cultivation can promote desertification. This is when a farmer plants crops too densely, or too many times a year. Bad practices also include not rotating crops each time you plant. These practices do not allow the ground to recuperate and regenerate itself. The ground can dry out too fast, and nutrients are devoured.

Kyle: Sounds like people have really been taking advantage of the land.

Kelsie: They have been, and now the consequences are now beginning to set in.

Mia: Many other things are capable of causing desertification.

Emily: She’s right. Deforestation is also beginning to take its toll on the land and on civilization. The demand for wood is rising, and there are not enough trees to support the demand. Forests are being destroyed rapidly, and there is not enough growth occurring for the forests to regenerate.

Kyle: It seems like desertification is really changing the land. What effects will this have on everything?

Mia: Well, since the ground is being deprived of nutrients, water, and material to anchor it to the ground, wind and water erosion have a much more noticeable effect on the ground. This has the potential to destroy societies that rely on the land.

Kyle: Finally, we should mention that it can be stopped. How in your opinion can we fix this issue?

Emily: In my professional opinion, I believe the best solution would be to take care of the land we have. We are the ones who brought on the problems of desertification so we need to be the ones to repair what we have done and make sure the future generations do not make the problems worse.

Kyle: Well, thank you for your time Dr. LaVonne, Ms. Quiqui, and Ms. Jones for their time. Now back to you, Joanna.

Joanna: Yes, thank you Kyle. Before we get to the weather report, we have a brief story from our economic correspondents overseas.

Economic Correspondents:

Roles: Reporter #1, Reporter #2, Reporter #3, and Local Mali Man  
  
R1: I'm here at the capital of Mali, Bamako, with (insert name of local man) talking about the effects of desertification on the economy. What is the main economic activity here?  
  
Local Man: Agriculture, we grow different crops, especially near the Niger River. Mostly cotton, rice, corn, and vegetables and most of it goes to feeding ourselves and families. We also have cattle, sheep, and goats.  
  
R1: How have your crops been doing recently?  
  
Local Man: Desertification has affected them a lot! Desertification has pretty much destroyed our crops and entire source of income. Subsistence farming is no longer possible- the soil is now useless. It is either blown away by the wind, or washed away by rain, removing most of the nutrients which let the salt build up, making it almost impossible to grow crops.  
  
R1: How has this affected your family?  
  
Local Man: Well I have a family of 6 and it is very hard to provide for them all. Desertification has created massive food shortages. Many times we go without eating.  
  
R1: Thank you (insert local Mali man' name). About 80% of Mali's population have engaged in agriculture as of 2001, and severe droughts and desertification have wiped out 80% of Mali's herds.   
  
R2: Mali is now among 10 of the poorest nations in the world, without the Niger River, what is left of Mali's economy would crash. Mali is also heavily dependent on foreign aid and vulnerable to the drop in the price of cotton, its main export. Annually, a Mali workers salary is about $1500 and they have to provide for their whole family with that, verses an individual Americans salary of $30,000 through $50,000 annually.   
  
R1: Mali has not only suffered from desertification but also severely from resource mismanagement. The national debt has grown rapidly. The government also doesn't support agriculture, which employs 4/5 of the people, but they support commercial products. Less than 1/5 of labor is industrial, and the people that do have jobs are commercial and very small scale. Furthermore, most manufacturing in Mali is the processing of food and agriculture products, or making constructional material and consumer goods.   
  
R2: People also make handicrafts, although that doesn't really give much toward the economy. The handicrafts include things such as clothes, shoes, pottery, and wood carving.   
  
R3: Overall, the economy of Mali has been destroyed due to desertification, and this hasn't only affected Mali, but all of Africa. Over 800 million Africans go to bed hungry every day and of those 300 million of those are children. Of those 300 million children only 8% are victims of famine or other emergency situations. Over 90% are suffering long-term malnourishment and micro-nutrient deficiency. This is caused by lack of food whose source is mainly from desertification and water scarcity. This is a growing problem that simply can’t be ignored any longer. Something needs to be done for these people, but at this point, it’s unclear what that could be. Joanna?

Joanna: Wow, what an awful problem. I really hope that something can be done about it soon. To fill us in on the political effects of desertification, we are now going to cut to our correspondents in (country).

Political Correspondent:

Katie: Colleen: Chan: Morgan:

Yes, thank you Joanna. We are reporting on events currently taking place in name of country. Many people have been wondering how the land turning into a desert could cause a war. Well, desertification, as you know, is caused when the land is overused and over-worked, which eventually leads to degradation of the soil. To help your understanding of the grave causes and effects of this situation, here’s a diagram.

POINT WITH STICK AS YOU MOVE ALONG THE DIAGRAM (colleen)

Climate change is caused by less rain and more desertification. This leads to less food output, and because food is an important necessity, these people will do anything to keep it growing in the short term, even if the effect could be catastrophic in the long term. The amount of arable land, or land used for growing crops, is decreased. This causes distress among minority groups and Arabs (or, as the diagram explains it, a lack of satisfaction). This, in turn, leads to tensions between ethnic groups, which easily lead into a civil conflict or war. In fact, of about 50 armed conflicts occurring today in Africa, it is estimated that approximately 20 of those are environmentally induced.

We will move now to our correspondent, name of correspondent, who is currently covering action taking place in name of country.

MOVE TO OTHER PERSON. THEY MIGHT BE NEXT TO A FAKE WINDOW WITH A PICTURE OF THE AFRICAN LANDSCAPE

Here in name of country there have been, and still are issues with migration of people. Due to the negative effects of desertification on the farming industry, many Africans are attempting to find ways to get around the lack of crops for their cattle. For some, the need of their cattle is so great that they will go to great lengths to find a grazing ground. I am interviewing one such cattle farmer, who wishes to remain unidentified.

HAVE THE INTERVIEW SET UP WHERE YOU CAN SEE THE REPORTER, BUT NOT THE INTERVIEWEE. POSSIBLY USE A SHEET, OR CONSTRUCTION PAPER

Interviewer: So when was the last time you came up against difficulties when attempting to feed your herd?

Person: Recently, since there are so few crops in my area. There have been many droughts and very little rain.

I: For our viewers at home, here is a visual. This graph shows the average of centimeters of rain falling per month in the Sahel for the past century.

SHOW GRAPH

I: What do you do to combat this obstacle?

P: I’ve had to cross the border of my country, and graze my cattle in name different from first country .

I: Have there been any difficulties arising from this course of action?

P: Yes, most certainly. The government is now taxing me and other farmers like me whenever we cross the border. It really makes life more difficult, plus it cuts into our profits.

I: Are there many others that are stuck in this situation?

P: I don’t know the exact numbers, but I know that there are many, many people that are going to have to cope with this, or their way of life could be seriously altered.

I: Thanks very much for your time, and now back to first person/people.

The Expert Panel and Closing: ?